

The relationship of the dysmenorrhea a in students with learning activities

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ABSTRACT

Dysmenorrhea is one of the genetic complaints experienced by almost all women but with different levels of pain and different pain responses, so that it has an impact on daily activities such as social, study, work and daily activities. Learning activities are a process of teaching and learning activities that can be in the form of listening, asking questions, discussing, and writing. This study aims to determine the relationship between learning activities and the incidence of dysmenorrhea. The research method used is descriptive analytic research with cross sectional design. The research sample was 89 students of SMA Muhammadiyah Jayapura with a sampling technique using simple random sampling. Data were collected from respondents using questionnaires. The result showed that 85.5% of students who experienced moderate pain and 77.9% of students who experienced severe pain stated that they did not concentrate when doing learning activities. The results of the chi square test showed p value = 0.001, which means that there is a relationship between the incidence of dysmenorrhea and student learning activities. Dysmenorrhea can affect learning activities, this is supported by the duration of bleeding, pain during dysmenorrhea, and the intensity of dysmenorrhea.

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INTRODUCTION

In the stage of human development, every human being must experience adolescence or adolescence, this period is usually called the transition period from children to adulthood which is marked by accelerated physical, mental, emotional, and social development (Cameron, 2022). According to WHO (World Health Organization) adolescence is a period of transition in an effort to find identity and biological and psychological maturity. Many typical changes that occur biologically in both male and female adolescents. Adolescents are residents in the age range of 10-19 years (WHO, 2022). Meanwhile, according to the Regulation of the Minister of Health of the Republic of Indonesia Number 25 of 2014, adolescents are residents in the age range of 10-18 years and according to the Population and Family Planning Agency (BKKBN) the age range Teenagers are 10-24 years old and unmarried. According to the 2010 Population Census, the number of the 10-19 year age group in

Indonesia is 43.5 million or about 18% of the total population. In the world, it is estimated that there are 1.2 billion youth groups or 18% of the world's population (WHO, 2022).

WHO data showed an incidence of 1,769,425 people (90%) of women experiencing severe dysmenorrhea as much as 10-15% (WHO, 2022). In Indonesia, more women experience dysmenorrhea but do not go to a doctor or puskesmas. The majority of dysmenorrhea cases are just silent and believe it will go away by itself. It is said that 90% of Indonesian women have experienced dysmenorrhea (Kemenkes RI, 2020). Dysmenorrhea is also responsible for absenteeism from work and school, as many as (13-51%) women have been absent at least once, and (5-14%) have been absent repeatedly. This study also reports that dysmenorrhea causes adolescent girls to often miss school (Suindri, Erawati, Darmapatni, & Sriasih, 2021). Menstruation is a normal part of the natural cyclical process that occurs in healthy women between puberty and the end of the reproductive years (Gutman, Nunez, & Fisher, 2022). Menstruation is a physiological thing in women that occurs from menarche to menopause. Menstruation comes every month at reproductive age, many women experience physical discomfort, or feel tortured before or during menstruation (Gedefaw et al., 2022). Menstruation or menstruation is periodic and cyclic bleeding from the uterus, accompanied by the release (desquamation) of the endometrium (Gutman et al., 2022).

Almost all women who experience menstruation have experienced menstrual pain with different levels. Menstruation or menstruation is the periodic discharge of blood and body cells from the vagina from the uterine wall of women. The average menstrual period for women is 3-8 days with an average cycle of 28 days per month. Symptoms are felt ranging from aches in the pelvis and lower abdomen to excruciating pain. In medical terms, pain or cramps during menstruation is called dysmenorrhea (Gutman et al., 2022). Dysmenorrhea or menstrual pain also has an impact on decreasing quality of life due to not attending college or working. This also has an impact on economic losses for women of childbearing age. A study conducted by Dawood 1984 in the United States showed that about (10%) women with dysmenorrhea could not continue their work due to the pain and every year there was an economic loss due to the loss of 600 million working hours with a loss of about two billion US dollars. Not only that, dysmenorrhea can also cause infertility and sexual function disorders if left untreated, depression and alteration of cardiac autonomic activity. It is estimated that the incidence of dysmenorrhea in Indonesia is among women of reproductive age (Y. I. Dewi & Suci, 2021). Other sources state that the incidence of dysmenorrhea in Indonesia is 64.25%, consisting of 54.89% primary dysmenorrhea and 9.36% secondary dysmenorrhea. Often, primary dysmenorrhea is experienced by majority of young women (Y. I. Dewi & Suci, 2021; Sari, Nurdini, Yuzela, Putri, & Sayuti, 2022). The number of symptoms that appear during dysmenorrhea can affect work activities and daily activities (Pradini & Hidayat, 2020). Primary dysmenorrhea results in decreased activity, such as not attending school, not participating in activities, just lying down, and having difficulty walking (Armour et al., 2020).

Pain that occurs during menstruation occurs due to excessive production of prostaglandins in the endometrium during the luteal phase. Prostaglandins diffuse into the endometrium and cause uterine contractions (Franjić, 2019). Dysmenorrhea is one of the most common gynecological complaints in young women who come to the clinic or doctor. Almost all women experience discomfort during menstruation, such as discomfort in the lower abdomen and usually accompanied by nausea, dizziness, and even fainting Armour et al. (2020) dysmenorrhea experienced by young women is also one of the main causes of absenteeism from school. In addition to reducing attendance (69.7%) young women who experience dysmenorrhoea also claimed to experience a decrease in academic achievement, decreased concentration (72.7%) and inability to answer questions on exams (54.3%). Majority of respondents admitted that their socialization relationship was disturbed because of dysmenorrhea (Abbas et al., 2020). Based on data obtained from SMA Muhammadiyah Jayapura, the total number of students is 329, which is divided into 3 levels, namely level 10 as many as 107 students with 54 males and 53 females, 11th grade as many as 116 students with 53 males and 63 females, while class 12 has 106 students with 54 boys and 52 girls.

Previous research by Hennegan, Shannon, Rubli, Schwab, and Melendez-Torres (2019) showed that students who experienced disturbances in learning activities were caused by menstrual pain that was felt in the learning process. This makes it difficult for students to concentrate because of the discomfort they feel when experiencing menstrual pain. Some students who experience menstrual pain (dysmenorrhea) during class hours also ask for permission to go home and sometimes ask permission to be given a rest dispensation in the UKS room. Another study by Fitri (2020) stated that dysmenorrhea is one of the main causes of school absenteeism in adolescent girls for several hours or several days. This is associated with a negative influence on social activities in most adolescent girls. Various factors have been tried to be identified to determine the risk factors associated with the incidence of dysmenorrhea, including age. The peak incidence of dysmenorrhea is in the age range from adolescence to adulthood, which is 15 to 25 years and will decrease after passing that age range. In addition to age, another risk factor that is often studied related to the incidence of dysmenorrhea is student learning activities. This study aims to determine the relationship between learning activities with the incidence of dysmenorrhea in female students.

RESEARCH METHOD

The type of research used is descriptive analytic with a cross sectional design. The research was conducted at SMA Muhammadiyah in March 2019. The target population was all students of SMA Muhammadiyah Jayapura. The sample of this study amounted to 89 students. Sampling using simple random sampling technique, with the criteria of students who were included as samples were willing to be respondents, students of class X and XI, female, had experienced dysmenorrhea (menstrual pain). Collecting data using a questionnaire consisting of 21 questions with assessment criteria, if the statement is positive the value is 4 for the answer very often and the value is 1 for the answer never. If the statement is negative, the value of 1 for the answer is very often and the value of 4 for the answer is never. Before being given the questionnaire, the researcher gave informed consent which contained the problem and research objectives as well as consent as a respondent. To ensure data quality, data cleaning was carried out to check the completeness of the data. The data was entered into the Microsoft Excel 2010 master table and then analyzed using SPSS Version 24. Statistical tests were carried out to see the relationship between learning activities and dysmenorrhoea.

RESULTS AND DISCUSSIONS

Results

Characteristics of respondents

Table 1. Characteristics of respondents

No.	Characteristics	n	%
1	Age (years)		
	14	2	2.2
	15	27	30.3
	16	45	50.6
	17	13	14.6
	18	2	2.2
2.	Grade		
	X	45	50.6
	XI	44	49.4
3.	Age First Menarche		
	10	1	1.1
	11	14	15.7
	12	27	30.3
	13	26	29.2

	14	18	20.2
	15	2	2.2
	16	1	1.1
4.	Bleeding duration (days)		
	3-5	29	32.9
	6-8	60	67.4
6.	Pain During Dysmenorrhea		
	Stay	28	31.5
	Disappear and arise	60	67.4
	Never	1	1.1
7.	Intensity of Dysmenorrhea		
	Mild pain	16	18.0
	Moderate pain	35	39.3
	Severe pain	26	29.2
	Very heavy pain	12	13.5
8.	Learning activity		
	Concentration	28	31.5
	Not concentrate	61	68.5
	Total	89	100%

Table 1 shows that most of the respondents were 16 years old, sitting in class X, 12 years old when they first experienced menarche, and the duration of bleeding was 6-8 days. As many as 67.4% of respondents feel the pain of dysmenorrhea comes and goes. The intensity of dysmenorrhea felt was moderate pain. As many as 68.5% of respondents stated that learning activities were not concentrated when experiencing dysmenorrhea.

Table 2. The relationship of learning activities with the incidence of dysmenorrhea in students

Dysmenorrhea	Learning activity						<i>p-value</i>
	Concentration		Not concentrate		Total		
	n	%	n	%	n	%	
Mild pain	9	56.3	7	43.8	16	100,0	0,001
Moderate pain	5	14.3	30	85.7	35	100,0	
Severe pain	6	23.1	20	76.9	26	100,0	
Very heavy pain	8	66.7	4	33.3	12	100,0	

Table 2 shows that 85.5% of students who experienced moderate pain and 77.9% of students who experienced severe pain stated that they did not concentrate when doing learning activities. The results of the chi square test showed p value = 0.001, which means that there is a relationship between the incidence of dysmenorrhea and student learning activities.

Discussion

The intensity of pain during menstruation can be caused by dysmenorrhea which has different levels of pain in each student according to what students feel during menstruation. The psychological impact of dysmenorrhea can be in the form of emotional conflicts, tension, and anxiety (Kazemi, Lalooha, Nooshabadi, & Haghighian, 2022). This can lead to feelings of discomfort and alienation. A little discomfort can quickly develop into a big problem with all the annoyance that comes with it. This will later affect their skills and abilities. The skills and skills referred to are broad, both personal skills which include: self-awareness and rational thinking skills, academic skills, and vocational skills. Dysmenorrhea causes learning activities in learning to be disrupted, concentration decreases or even does not exist so that the ongoing material cannot be captured by women who experience dysmenorrhea (D. P. Dewi, Sandayanti, & Sani, 2021). Menstrual pain (dysmenorrhea) has a considerable impact on young women because it causes disruption of daily activities. Adolescent

girls who experience menstrual pain during menstruation will feel limited in carrying out activities, especially learning activities at school.

The results of the research showed that 61 (68.5%) students did not concentrate on their studies due to the impact caused by dysmenorrhea. Menstrual disorders that often occur in students can prevent students from doing normal activities. Many students experience lack of concentration in the teaching and learning process which makes it difficult for students to concentrate because of the discomfort they feel when menstrual pain occurs. Adolescent girls who are experiencing menstrual pain (dysmenorrhea) while participating in learning activities can cause learning activities to be disrupted, not enthusiastic, concentration decreases and it is even difficult to concentrate so that the material presented during learning cannot be well received, even if some do not attend school (Armour et al., 2020). The most common impact caused by dysmenorrhea is activity disturbance so that women with dysmenorrhea cannot carry out normal daily activities, women who experience menstrual pain will be more sensitive and easily disturbed in carrying out daily activities such as sports, work, and social life. So that this impact affects concentration compared to women who do not experience menstrual pain (dysmenorrhea) will not experience a decrease in concentration and can carry out daily activities normally and there are no obstacles due to menstrual pain factors (Ortiz, Espinoza-Ramírez, Cariño-Cortés, & Moya-Escalera, 2022).

The results showed that there was a relationship between learning activities and the incidence of dysmenorrhea in high school students of Muhammadiyah Jayapura. This is supported by the research of Saputra, Khasanah, Hayati, and Susilawati (2021) which states that there is a relationship between dysmenorrhea and learning activities. The respondent's learning activities were quite disturbed by the occurrence of dysmenorrhea he experienced. Dysmenorrhea is one of the main causes of school absenteeism in adolescent girls for several hours or days. In addition to the dysmenorrhea factor, the use of gadgets also causes negative activities in the social life of adolescents due to low activity due to searching for menstruation (Maryorita, Sirken, & Agussalim, 2020). This is associated with a negative influence on social activities in most adolescent girls (Brito dos Santos et al., 2021). Adolescent girls who experience dysmenorrhea during menstruation have more school holidays or absences and perform less well at school than those who do not experience dysmenorrhea (Oktobriarani & Mardhatillah, 2021).

CONCLUSION

The incidence of dysmenorrhea is related to learning activities in students. Dysmenorrhea can affect learning activities, this is supported by the duration of bleeding, pain during dysmenorrhea, and the intensity of dysmenorrhea.

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